

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A system for sensing relative position between a chassis ~~(5a, 5b)~~ and an axle ~~[[3]]~~ on a vehicle, which vehicle is provided with a ~~so-called~~ V-rod ~~[[1]]~~ mounted between the chassis ~~(5a, 5b)~~ and the axle ~~[[3]]~~ where ~~[[the]]~~ a pointed end of the V is connected by a ball joint ~~[[2]]~~ to the axle ~~[[3]]~~ of the vehicle and ~~[[the]]~~ opposite ends ~~(4a, 4b)~~ of the V-rod ~~[[1]]~~ are connected to the chassis ~~(5a, 5b)~~ of the vehicle, which ball joint ~~[[2]]~~ comprises a partly ball-shaped body ~~[[8]]~~ permanently fixed to the axle or the V-rod, encircled by a complementarily shaped collar ~~[[9]]~~ arranged round the whole or parts of the ball-shaped body ~~[[8]]~~, which ball joint ~~[[2]]~~ is covered by a cap or housing, ~~characterised in that~~ wherein on the ball ~~[[8]]~~ or in connection with the housing in the ball joint there are mounted a sensor ~~[[6]]~~ and an identification area ~~[[7]]~~ which is detected by the sensor ~~[[6]]~~ respectively, which identification area ~~[[7]]~~ is provided with information for registering position in at least one direction and that the sensor ~~[[6]]~~ registers the position of the identification area ~~[[7]]~~ in at least one direction.

2. (Currently amended) A system according to claim 1, ~~characterised in that~~ wherein the identification area ~~[[7]]~~ which is detected by the sensor ~~[[6]]~~ is provided with information for registering position in two directions and ~~[[that]]~~ the sensor ~~[[6]]~~ registers the position of the identification area ~~[[7]]~~ in the two directions.

3. (Currently amended) A system according to claim 1 or 2, ~~characterised in that~~ wherein the sensor ~~[[6]]~~ is of a type that detects the identification

area ~~[(7)]~~ in one of the following ways: mechanical identification, distance identification with light, distance identification based on surface state as light reflection, magnetic identification or ultrasound.

4. (Currently amended) A system according to claim 1 or 2, ~~characterised in that~~ wherein the identification area ~~[(7)]~~ is provided with information consisting of a number of individual, dissimilar sections with different characteristics such as: reflecting power, material thickness, surface state or mechanical profile.

5. (Currently amended) A system according to ~~claims 1-4~~ claim 1 or 2, ~~characterised in that~~ wherein the identification area ~~[(7)]~~ which is detected by the sensor is provided with information for registering position in two directions where the information in one of the directions ~~[(7c)]~~ provides progressive sensing while the information in the other direction provides sensing of the extreme points ~~(7a, 7b)~~ and ~~[(that)]~~ the sensor ~~[(6)]~~ progressively registers the position of the identification area in one of the two directions, in addition to which the sensor ~~[(6)]~~ registers extreme points ~~(7a, 7b)~~ in the second of the two directions.

6. (Currently amended) A system according to ~~claims 1-4~~ claim 1 or 2, ~~characterised in that~~ wherein the identification area ~~[(7)]~~ which is detected by a sensor ~~[(6)]~~ is provided with information for registering position in two directions where the information in both directions provides progressive sensing so that the sensor(s) ~~[(6)]~~ progressively registers the position of the identification area ~~[(7)]~~ in one or both of the two directions.

7. (Currently amended) A system according to ~~claims 1-6~~ claim 1 or 2, ~~characterised in that~~ wherein the information in the identification area ~~[(7)]~~ is provided

with a majority of individual sections for progressive detection of the position and a minority of individual sections for registering position at the extreme points (7a, 7b).

8. (Currently amended) A system according to ~~claims 3-4~~ claim 3, ~~characterised in that~~ wherein the sensor is connected to the identification via a mechanical connection.

9. (Currently amended) A system according to claim 8, ~~characterised in that~~ wherein the sensor is a torsion potentiometer ~~[(12)]~~.

10. (Currently amended) A system according to ~~one or more of the above claims~~ claim 1, ~~characterised in that the~~ wherein a signal representing the detected position in one or two directions is transmitted from the sensor ~~[(6)]~~ to a processing unit, which in the event of rapid changes of position activates an alarm signal for play in the ball bearing ~~[(2)]~~.

11. (Currently amended) A system according to ~~one or more of the above claims~~ claim 1, ~~characterised in that the~~ wherein a signal representing the detected distance in the direction representing heeling is transmitted from the sensor to a processing unit where accumulated heeling relative to a neutral starting point is registered, and which processing unit activates an alarm signal for dangerous heeling when the accumulated distance representing heeling exceeds a predetermined value.